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Papers read before the Society from March 1895 to January 1896.

1895.

Mar. 8. Ephemeris of the five inner satellites of *Saturn*, 1895 A. Marth.

Filar micrometer measures of the diameters of the four bright satellites of *Jupiter*, made with the 36-inch equatorial of the Lick Observatory. E. E. Barnard.

The transit of *Mercury*, 1894 November 10. W. F. Gale.

A list of probably new double stars. R. T. A. Innes.

The transit of *Mercury*, 1894 November 10, observed in Queensland. J. P. Thomson.

Micrometrical measures of the ball and ring system of the planet *Saturn*, and measures of his satellite *Titan*, made with the 36 inch equatorial of the Lick Observatory. E. E. Barnard.

Double star measures, 1892–94. W. H. Maw.

Results of double star measures with the 8-inch equatorial at Windsor, New South Wales, in 1894. J. Tebbutt.

Notes on the variable stars X and W *Sagittarii*. Lieutenant-Colonel E. E. Markwick.

Note on a suggested form of equatorial mounting for a (modified) Newtonian reflector. Rev. C. D. P. Davies.

On the proper motion of the star *Cephei* 24 (Hev.). W. T. Lynn.

On the proper motion of the star *B.A.C.* 793. W. T. Lynn.

The Wilsonian theory and the Stonyhurst drawings of Sun-spots. Rev. W. Sidgreaves.

Observations of Encke's Comet made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

An apparatus for mechanically calculating star corrections. W. E. Cooke.

Note on the above paper. H. H. Turner.

A negative optical proof of the absence of seas in *Mars*. H. Dennis Taylor.

A systematic comparison between the places of stars given in the Cape Catalogue for 1880 and the Radcliffe Catalogue for 1890. E. J. Stone.

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Mar. 8. On the mean places of eight southern close polar stars. E. J. Stone.

Observations of the vertical diameter of the planet *Jupiter*. T. J. Moore.

Apr. 10. Equatorial comparisons of *Jupiter* and 1 *Geminorum*. John Tebbutt.

On a modified form of Cassegrain telescope. W. R. Brooks.

Note on the total eclipse of the Moon, 1895 March 10. H. F. Newall.

Note on η *Cassiopeiæ*. T. Lewis.

Occultation of *Antares*, 1894 October 31. R. T. A. Innes.

The Brachy telescope of Messrs. Fritsch and Forster of Vienna. A. A. Common.

Observations of occultations of stars during the lunar eclipse of 1895 March 10, made at the Radcliffe Observatory, Oxford. Communicated by E. J. Stone.

The total eclipse of the Moon, 1895 March 10. G. J. Newbegin.

The solar eclipse of 1895 March 25. G. J. Newbegin.

Pallas and *Vesta* in 1895. W. W. Bryant.

Observation of the partial eclipse of 1895 March 25, at the Armagh Observatory. J. L. E. Dreyer.

Observations of Occultations of stars during the total eclipse of the Moon on 1895 March 10, made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

Notes on the observations for coincidence of the collimators in flexure determinations with the Greenwich transit-circle, made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

May 10. Occultations observed at Harrow during the total eclipse of the Moon, 1895 March 10. Lieutenant-Colonel G. L. Tupman.

Partial eclipse of the Sun, 1895 March 25. A. A. Rambaut.

On the variable nebula of Hind and Struve in *Taurus*, and on the nebulous condition of the star *T Tauri*. E. E. Barnard.

On the rotation of *Saturn* in 1894. A. Stanley Williams.

Observations of minor planets made at the Observatory, Tacubaya, Mexico. F. Valle.

The thermal radiation from Sun-spots: Observations made at Daramona, Streete, Co. Westmeath. W. E. Wilson.

On a fixed system of star co-ordinates (abstract). R. H. M. Bosanquet.

Photograph of the nebula near 15 *Monocerotis*. Isaac Roberts.

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May 10. Photograph of the Crab Nebula M 1 *Tauri.* Isaac Roberts.

Observations of the phenomena of *Jupiter's* satellites, and of the transits of the red spot, dark and bright spots, &c., made at Bermerside Observatory, Halifax, during the winter of 1894–95. J. Gledhill.

Answer to an inquiry in the *Bulletin Astronomique* for 1895 May. E. J. Stone.

Micrometer measurements of *Phobos*, the inner satellite of *Mars*, during the opposition of 1894. H. F. Newall.

June 14. On a photographic study of the Earth-lit portion of the new Moon. E. E. Barnard.

On a great photographic nebula in *Scorpio* near *Antares*. E. E. Barnard.

Note on the proper motion of *Arcturus*. W. T. Lynn.

Observations of *Jupiter*. W. F. Denning.

The relation between precession and proper motion. R. H. M. Bosanquet.

A general method for facilitating the solution of Kepler's equation by mechanical means. T. J. J. See.

On the accuracy of late catalogues of declinations of standard stars. T. H. Safford.

Ephemeris for physical observations of *Jupiter*, 1895–96. A. Marth.

On a catalogue of stars in the Calendarium of Mohammad Al Achsasi Al Mouakket. E. B. Knobel.

Diameters of *Jupiter* and satellites observed at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

A determination of the mean N.P.D., 1790 January 0, of γ *Draconis* from observations made at Oxford by Dr. Hornsby. E. J. Stone.

Meridian observations of *Sirius* and *Procyon* at the Royal Observatory, Greenwich, 1836–94. W. G. Thackeray.

Note on the binary star ι *Leonis*. Alice Everett.

Further measures of double stars made at the Temple Observatory, Rugby, by G. M. Seabroke and H. P. Highton.

On the angular distance of two stars in the *Pleiades* suitable for determining the value of a micrometer screw. H. H. Turner.

Nov. 8. Results of micrometer comparisons of *Saturn* and κ *Virginis*. John Tebbutt.

Observations of phenomena of *Jupiter's* satellites with the 8-inch equatorial at Windsor, New South Wales, in the year 1895. John Tebbutt.

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Nov. 8. Comparisons of the Sun's longitudes for 1900, computed from Newcomb's tables of the Sun, with those computed from Le Verrier's tables. A. M. W. Downing.

Description of a mechanical apparatus for computing refractions. W. E. Cooke.

Micrometrical determinations of the diameters of the minor planets, *Ceres* (1), *Pallas* (2), *Juno* (3), and *Vesta* (4), made with the 36-inch equatorial of the Lick Observatory, and on the albedos of these planets. E. E. Barnard.

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On the extended nebulosity about 15 *Monocerotis*. E. E. Barnard.

Data for computing the positions of the satellites of *Jupiter*, 1895–96. A. Marth.

Invisibility of Hind's variable nebula (N.G.C. 1555). E. E. Barnard.

Observations of Encke's Comet, 1894–95, made at the National Observatory, Tacubaya, Mexico. F. Valle.

Observations of minor planets made at the National Observatory, Tacubaya, Mexico. F. Valle.

Note on Hansen's lunar and planetary theories. E. W. Brown.

Results of filar micrometer comparisons of *Saturn* and 96 *Virginis*, and of *Ceres* with neighbouring stars. John Tebbutt.

Photograph of the nebula ♅ VI. 41, and a new nebula in *Draco*. Isaac Roberts.

Photograph of the cluster ♅ VIII. 76, and of a new nebula in *Cygnus*. Isaac Roberts.

Observations of the variable star *T Centauri*. Lieut.-Colonel E. E. Markwick.

Mean areas and heliographic latitudes of sun-spots, deduced from photographs taken at the Royal Observatory, Greenwich; at Dehra Dûn (India), and in Mauritius. Communicated by the Astronomer Royal.

Diameters of *Saturn* and his rings observed during the opposition of 1895 at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

Note on the discovery of the graphical method for solving Kepler's equation by means of a curve of sines. T. J. J. See.

Note on the value of the longitude in the lunar theory when the Sun's mass is put zero. P. H. Cowell.

The orbit of Σ 1879. T. Lewis.

Note on the measurement of paper prints of stellar photographs. H. H. Turner.

Dec. 13. The radiant point of the October meteors. W. F. Denning.

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Dec. 13. Setting apparatus for a transit-circle. W. E. Cooke.

On the proper motion of Lacaille 4336. R. T. A. Innes.

On the proper motion of μ *Cassiopeiæ.* W. T. Lynn.

Photograph of the spiral nebula M. 33 *Trianguli.* Isaac Roberts.

Note on some remarks of M. O. Callandreau in the *Bulletin Astronomique* for 1895 November. E. J. Stone.

Note on a crayon drawing of the Moon by John Russell, R.A., at the Radcliffe Observatory, Oxford. E. J. Stone.

Observations of comets *Encke* 1894 and *Swift* 1895 August 20 made at the Radcliffe Observatory, Oxford. Communicated by E. J. Stone.

Observations of Perrine's Comet (*c* 1895) made with the altazimuth at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

Observation of variable stars. The late George Knott.

Note on Newcomb's Tables of the Sun. A. M. W. Downing.

1896 Jan. 10. Details of the total solar eclipse of 1896 August 8–9 for Kushiro, in the island of Yezo. Communicated by the Superintendent of the *Nautical Almanac.*

Photograph of the *Owl* nebula M 97, and of the nebula H V. 46 *Ursæ Majoris.* Isaac Roberts.

Photograph of the cluster H VII. 66, and of the nebula H IV. 75 *Cephei.* Isaac Roberts.

Micrometrical measures of the ball and ring system of *Saturn*, and measures of the diameter of his satellite *Titan*, with some remarks on large and small telescopes. E. E. Barnard.

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Ephemeris for physical observations of the Moon 1896. A. Marth.

On the drift of the surface material of *Jupiter* in different latitudes. A. Stanley Williams.

On the determination of positions of stars for the Astrographic catalogue at the Royal Observatory, Greenwich. W. H. M. Christie and F. W. Dyson.

Expressions for the elliptic co-ordinates of a moving point to the seventh order of small quantities. E. J. Stone.